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SUPER THERMAL GREASE III

# Safety Data Sheet

## Section 1: Identification

### Product Identifier and Other Means of Identification

**Product Name:** 8617**Other Means of Identification:** Super Thermal Grease III**Related Part #** 8617-85ML, 8617-1P, 8617-1G

### Recommended Use and Restriction on Use

**Use:** Thermal interface grease for improving heat flow between the CPU and heat sink**Uses Advised Against:** Not applicable

### Details of Manufacturer or Importer

**Manufacturer**MG Chemicals  
1210 Corporate Drive  
Burlington, Ontario L7L 5R6  
CANADAMG Chemicals (Head Office)  
9347-193 Street  
Surrey, British Columbia V4N 4E7  
CANADA**☎** +1-800-340-0772  
**Fax** +1-800-340-0773  
**E-mail** support@mgchemicals.com  
**Web** www.mgchemicals.com**☎** +1-905-331-1396  
**Fax** +1-905-331-2682  
**E-mail** info@mgchemicals.com**E-MAIL** (Competent Person): [sds@mgchemicals.com](mailto:sds@mgchemicals.com)

### Emergency Phone Number

**For hazardous material incidents ONLY** (leaks, spills, fires, exposures or accidents)  
USA or CANADA—Call Verisk 3E at **+1-866-519-4752** or **+1-760-476-3962**  
(Service access code: 335388)**For emergencies involving the transport of dangerous goods;** 24/7 service  
CANADA—Call CANUTEC collect at **+1-613-996-6666** or **\*666** on cellular phones

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**Section 2: Hazard(s) Identification**
**Classification of Hazardous Chemical**
**GHS Categories**

Criteria	Category	Signal Word	Pictograms
Sensitization	Skin	1	Warning
Hazardous to the Aquatic Environment	Chronic	3	Exclamation none

*Note:* The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

**Label Elements**

<b>Signal Word</b>	<b>WARNING</b>
<b>Pictograms</b>	<b>Hazard Statements</b>
	H317: May cause an allergic skin reaction
<i>No symbol mandated</i>	H412: Harmful to aquatic life with long lasting effects
<b>Prevention</b>	<b>Precautionary Statements</b>
P261	Avoid breathing fume or vapors.
P272	Contaminated work clothing should not be allowed out of the workplace.
P280	Wear protective gloves.
P273	Avoid release to the environment.

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<b>Response</b>	<b>Precautionary Statements</b>
P302 + P352	IF ON SKIN: Wash with plenty of water.
P333 + P313	If skin irritation or rash occurs: Get medical advice or attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
<b>Disposal</b>	<b>Precautionary Statements</b>
P501	Dispose of contents in accordance to local, regional, national, and international regulations.

**Hazards Not Otherwise Classified**

<b>Other Criteria</b>	<b>Hazard Statements/Precautionary Statement</b>	<b>Signal Word</b>	<b>Pictograms</b>
None	None	None	None

**Section 3: Composition/Information on Ingredients**

<b>CAS #</b>	<b>Chemical Name</b>	<b>%(weight)</b>
1344-28-1	aluminum oxide	50%
118685-22-6	decanoic acid, mixed esters with dipentaerythritol, heptanoic acid, isononanoic acid, and octanoic acid	26%
12001-85-3	naphthenic acids, zinc salts	2%

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**SUPER THERMAL GREASE III****Section 4: First Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
<b>IF ON SKIN</b>	P302 + P352, P362 + P364, P333 + P313
<b>Immediate Symptoms</b>	<i>irritation, redness, allergic contact dermatitis</i>
<b>Response</b>	Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice or attention.
<b>IF IN EYES</b>	P305 + P351 + P338
<b>Immediate Symptoms</b>	<i>low toxicity: mild irritation, redness</i>
<b>Response</b>	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>IF INHALED</b>	P304 + P340
<b>Immediate Symptoms</b>	<i>low toxicity—no symptoms known or expected</i>
<b>Response</b>	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.
<b>IF SWALLOWED</b>	P301 + P330 + P331
<b>Immediate Symptoms</b>	<i>low toxicity—no symptoms known or expected</i>
<b>Response</b>	Rinse mouth. Do NOT induce vomiting.

**Section 5: Fire Fighting Measures**

<b>Extinguishing Media</b>	In case of fire: Use extinguishing media suitable for surrounding material.
<b>Specific Hazards</b>	Not flammable or combustible, but burns if involved in a fire. Avoid breathing combustion products.
<b>Combustion Products</b>	Produces carbon oxides (CO, CO <sub>2</sub> ), aluminum oxides, boron oxides, toxic fumes, and smoke.
<b>Fire-Fighter</b>	Wear self-contained breathing apparatus and full fire-fighting turnout gear.

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**SUPER THERMAL GREASE III****Section 6: Accidental Release Measures**

<b>Personal Protection</b>	See personal protection equipment in Section 8.
<b>Precautions for Response</b>	Avoid breathing dust or fumes. Remove or keep away all sources of extreme heat.
<b>Environmental Precautions</b>	Avoid release to the environment.
<b>Containment Methods</b>	Not applicable—not readily flowable
<b>Cleaning Methods</b>	Collect grease in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towel and place dirty towels in container. Wash spill area with soap and water to remove the last traces of residue.
<b>Disposal</b>	Dispose of spill waste according to Section 13.

**Section 7: Handling and Storage**

<b>Prevention</b>	Avoid breathing fume or vapors. Avoid release to the environment.
<b>Handling</b>	Wear protective gloves. Wash hands thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Take off contaminated clothing and wash it before reuse.
<b>Storage</b>	<b>RECOMMENDATION:</b> Keep in a dry and clean area, away from incompatible substances.

**Section 8: Exposure Controls/Personal Protection**
**Substances with Occupational Exposure Limit Values**

Chemical Name	Country or Vendor	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
aluminum oxide (dust/mist)	ACGIH	1 mg/m <sup>3</sup>	Not established
	U.S.A. OSHA PEL	15 mg/m <sup>3</sup> a)	Not established
	Canada AB	10 mg/m <sup>3</sup>	Not established
	Canada BC	3 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
	Canada ON	Not established	Not established
	Canada QC	10 mg/m <sup>3</sup>	Not established

*Note:* The ACGIH<sup>1</sup>, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from the RTECS database<sup>2</sup> and from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

**Engineering Controls**
**Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL).

Because all particles are inextricably bound in the grease, no respirable airborne particles are possible during normal use.

**Personal Protective Equipment**
**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

**RECOMMENDATION:** Ensure that glasses have side shields for lateral protection.

**Skin Protection**

Wear appropriate protective clothing to prevent skin contact.

**RECOMMENDATION:** Use of protective gloves in butyl rubber, latex, neoprene, or other chemically resistant gloves.

**Respiratory Protection**

In the unlikely event of exposure to mist, wear oil resistant or oil proof particulate respirators or filter masks.

**RECOMMENDATION:** Consult your local safety supply store to ensure your respirator or mask.

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**8617****SUPER THERMAL GREASE III****General Hygiene Considerations**

Wash hands thoroughly with water and soap after handling.

**Section 9: Physical and Chemical Properties**

<b>Physical State</b>	Solid	<b>Lower Flammability Limit</b>	Not applicable
<b>Appearance</b>	White, grease	<b>Upper Flammability Limit</b>	Not applicable
<b>Odor</b>	Low odor	<b>Vapor Pressure @20 °C</b>	Not available
<b>Odor Threshold</b>	Not available	<b>Vapor Density</b>	Not available
<b>pH</b>	Not available	<b>Relative Density @25 °C</b>	1.96
<b>Freezing/Melting Point</b>	Not available	<b>Solubility in Water</b>	<0.1%
<b>Initial Boiling Point</b>	Not available	<b>Partition Coefficient n-octanol/water</b>	Not available
<b>Flash Point <sup>a)</sup></b>	550 °C [1 022 °F]	<b>Auto-ignition Temperature</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Decomposition Temperature</b>	Not available
<b>Flammability</b>	Non Flammable	<b>Viscosity @40 °C</b>	>20.5 mm <sup>2</sup> /s

a) Based on synthetic oil component Cleveland open cup value

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**Section 10: Stability and Reactivity**

<b>Reactivity</b>	Not applicable
<b>Chemical Stability</b>	Chemically stable at normal temperatures and pressures
<b>Conditions to Avoid</b>	Very high heat (such as soldering or welding) and incompatible substances.
<b>Incompatibilities</b>	Halogens, strong oxidizing agents, strong acids, strong bases
<b>Polymerization</b>	Will not occur
<b>Decomposition</b>	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5.

**Section 11: Toxicological Information****Summary of Effects and Symptoms by Routes of Exposure**

<b>Eyes</b>	May cause mild eye irritation, redness. The aluminum oxide is mechanically abrasive.
<b>Skin</b>	May cause an allergic skin reaction.
<b>Inhalation</b>	None expected under normal conditions. When heated to extreme temperatures, product fumes or combustion gases may result in toxic gas emissions.
<b>Ingestion</b>	Low toxicity—no symptoms known or expected
<b>Chronic</b>	Prolonged or repeated inhalation exposure to aluminum oxide particles may lead to lung scarring and reaction to dust deposition in the lungs.

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**Acute Toxicity (Lethal Exposure Concentrations)**

<b>Chemical Name</b>	<b>LD50 oral</b>	<b>LD50 dermal</b>	<b>LC50 inhalation</b>
aluminum oxide	>5 000 mg/kg Rat	Not available	Not available
decanoic acid, mixed esters with dipentaerythritol, heptanoic acid, isononanoic acid, and octanoic acid	Not available	Not available	Not available
naphthenic acids, zinc salts	4 920 mg/kg Rat	>2 g/kg Rabbit	11 600 mg/m <sup>3</sup> Rat 4 h

*Note:* Toxicity data from the RTECS<sup>2</sup> and ECHA were consulted. The data from supplier SDSs' were also consulted.

**Other Toxicological Effects**

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/irritation</b>	Based on available data, the classification criteria are not met.
<b>Sensitization</b> (allergic reactions)	Naphthenic acids, zinc salts, may cause an allergic skin reaction.
<b>Carcinogenicity</b> (risk of cancer)	Not classified or listed as a carcinogen by IARC, ACGIH, CA Prop 65, or NTP.
<b>Mutagenicity</b> (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
<b>Reproductive Toxicity</b> (risk to sex functions)	Based on available data, the classification criteria are not met.
<b>Teratogenicity</b> (risk of fetus malformation)	Based on available data, the classification criteria are not met.
<b>STOT-single exposure</b>	Based on available data, the classification criteria are not met.
<b>STOT-repeated exposure</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met. There are no category 1 components, and the kinematic viscosity is >20.5 mm <sup>2</sup> /s at 40 °C.

**8617****SUPER THERMAL GREASE III****Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

Based on available data, aluminum oxide is not classified as environmental hazard according to GHS criteria.

Decanoic acid, mixed esters with dipentaerythritol, heptanoic acid, isononanoic acid, and octanoic acid is hazardous to the aquatic environment with an chronic category 2 classification.

Naphthenic acids, zinc salts is hazardous to the aquatic environment with an chronic category 3 classification.

**Acute Ecotoxicity**

Based on available data, does not meet the classification criteria.

**Chronic Ecotoxicity**

Category 3

Harmful to aquatic life with long lasting effects

Avoid release to the environment.

**Biodegradability**

Not readily biodegradable

**Other Effects**

Not available

**Section 13: Disposal Information**

Dispose of contents in accordance with all local, regional, national, and international regulations.

**8617****SUPER THERMAL GREASE III****Section 14: Transport Information****Ground****Refer to TDG** (Canadian Transportation of Dangerous Goods regulations) and **USA DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Not Regulated

**Air****Refer to ICAO-IATA Dangerous Goods Regulations.**

Not Regulated

**Sea****Refer to IMDG regulations.**

Not Regulated

**Section 15: Regulatory Information****Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

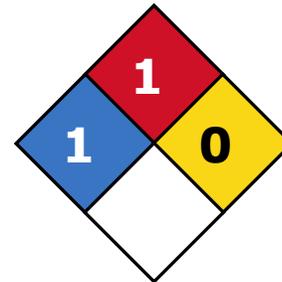
**Hazardous Products Act (R.S.C., 1985, c. H-3)**

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

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**8617****SUPER THERMAL GREASE III****USA****Other Classifications****HMIS<sup>®</sup> RATING**

<b>HEALTH:</b>	<b>*</b>	<b>1</b>
<b>FLAMMABILITY:</b>		<b>1</b>
<b>PHYSICAL HAZARD:</b>		<b>0</b>
<b>PERSONAL PROTECTION:</b>		

**NFPA<sup>®</sup> 704 CODES**

*Approximate HMIS and NFPA Risk Ratings Legend:*

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

**CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

**EPCRA** (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains aluminum oxide (CAS# 1344-28-1), which is subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

**TSCA** (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

**California Proposition 65** (Chemicals known to cause cancer or reproductive toxicity, USA)

This product does not contain any of the listed substances.

**Europe****RoHS** (Restriction of Hazardous Substances Directive)

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, PBDE's, DEHP, BBP, DBP, or DIBP and complies with European RoHS regulations.

**WEEE** (Waste Electrical and Electronic Equipment Directive)

This product is not a piece of electrical or electronics equipment and is therefore not governed by this regulation.

**8617****SUPER THERMAL GREASE III****Section 16: Other Information****MSDS Prepared by** MG Chemicals' Regulatory Department**Date of Issue** 11 March 2021**Supersedes** 28 February 2020**Reason for Changes:** Change to transport section.**Reference**

1) ACGIH 2017 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2017).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

**Abbreviations**

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
GHS	Globally Harmonized System of Classification of Labeling of Chemicals
LC50	Lethal Concentration 50%
LCLo	Lowest published lethal concentration
LD50	Lethal Dose 50%
PEL	Permissible Exposure Limit
PPE	Personal Protection Equipment
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

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**Technical Queries** Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at [www.mgchemicals.com](http://www.mgchemicals.com).

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